

## **Approach to the genetics of alcoholism: A review based on pathophysiology. (review).**

Koehnke MD. *Biochemical Pharmacology* 75(1): 160-177, 2008. (238 refs.)

Alcohol dependence is a common disorder with a heterogeneous etiology. The results of family, twin and adoption studies on alcoholism are reviewed. These studies have revealed a heritability of alcoholism of over 50%. After evaluating the results, it was epidemiologically stated that alcoholism is a heterogeneous complex disorder with a multiple genetic background. Modern molecular genetic techniques allow examining specific genes involved in the pathophysiology of complex diseases such as alcoholism. Strategies for gene identification are introduced to the reader, including family-based and association studies. The susceptibility genes that are in the focus of this article have been chosen because they are known to encode for underlying mechanisms that are linked to the pathophysiology of alcoholism or that are important for the pharmacotherapeutic approaches in the treatment of alcohol dependence. Postulated candidate genes of the metabolism of alcohol and of the involved neurotransmitter systems are introduced. Genetic studies on alcoholism examining the metabolism of alcohol and the dopaminergic, GABAergic, glutamatergic, opioid, cholinergic and serotonergic neurotransmitter systems as well as the neuropeptide Y are presented. The results are critically discussed followed by a discussion of possible consequences. Copyright 2008, Elsevier Science.

## **Association of Harris lines and shorter stature with ethanol consumption during growth.**

Gonzalez-Reimers E; Perez-Ramirez A; Santolaria-Fernandez F; Rodriguez-Rodriguez E; Martinez-Riera A; Duran-Castellon MD et al. *Alcohol* 41(7): 511-515, 2007. (25 refs.)

Ethanol consumption may impair bone growth. Transverse radiopaque lines (Harris lines) have been interpreted as manifestations of bone growth arrest due to nutritional stress. It is possible that ethanol consumption during growth leads to Harris lines formation and to a shorter stature. Plain X-ray film of the right tibia was performed to 175 individuals, who

were inquired about ethanol consumption, periods of perceived hunger, and protracted illness during growth period (from birth to 18 years of age). Stature was also recorded. Men who drank during growth showed a shorter stature than those who did not ( $t = 3.65$ ,  $P < .001$ ). Differences were not statistically significant among women ( $t = 0.95$ ). Neither periods of perceived hunger nor illness were associated to differences in stature. Ethanol consumption during growth showed a significant association with the presence of Harris lines ( $\chi^2 = 15$ ,  $P < .001$ , Odds Ratio [OR] = 3.39, confidence interval [CI] 1.81-6.33), an association which was more marked between having two or more Harris lines and drinking during growth ( $\chi^2 = 23.19$ ,  $P < .001$ , OR = 6.04, CI = 2.79-13.11) or having three or more lines and drinking during growth ( $\chi^2 = 15.93$ ,  $P < .001$ , OR 7.41, CI = 2.47-22.21). Periods of perceived hunger during growth were also related to the presence of two or more Harris lines ( $\chi^2 = 4.66$ ,  $P = .031$ , OR = 2.055, CI = 1.065-3.965), but no association was observed between illness and Harris lines, two or more Harris lines, and three or more Harris lines. Multivariate analysis showed that only ethanol consumption during growth period was associated with Harris lines. Copyright 2007, Elsevier Science.

## **Biomarkers to disclose recent intake of alcohol: Potential of 5-hydroxytryptophol glucuronide testing using new direct UPLC-tandem MS and ELISA methods.**

Beck O; Stephanson N; Bottcher M; Dahmen N; Fehr C; Helander A. *Alcohol and Alcoholism* 42(4): 321-325, 2007. (25 refs.)

Aims: This study compared two new methods for direct determination of 5-hydroxytryptophol glucuronide (GTOL) in urine, a biomarker for detection of recent alcohol consumption. Methods: Urine samples were collected from ten alcoholic patients during recovery from intoxication. A direct injection ultra-performance liquid chromatography-tandem mass spectrometry (UPLC-MS/MS) method for measurement of the urinary GTOL to 5-hydroxyindoleacetic acid (5-HIAA) ratio, and an ELISA assay for direct measurement of GTOL, were

used. Comparison was made with the urinary ethanol and ethyl glucuronide (EtG) concentrations. Results: The breath ethanol concentration on admission ranged between 1.0-3.1g/l. The UPLC-MS/MS method showed a median detection time of 39 h for an elevated urinary GTOL/5-HIAA ratio, while EtG was detected for a median of 65 h. Determination of GTOL by the ELISA assay showed 87% sensitivity in detecting positive samples at a 44% specificity, as compared with the UPLC-MS/MS method. Conclusions: The lower sensitivity of the urinary GTOL/5-HIAA ratio compared with EtG for recent drinking may be clinically useful, in cases where the EtG test provides an unwanted high sensitivity for intake of only small amounts of alcohol or unintentional ethanol exposure. Copyright 2007, Oxford University Press.

#### **Dose-response relation between volume of drinking and alcohol-related diseases in male general hospital inpatients.**

Lau K; Freyer-Adam J; Coder B; Riedel J; Rumpf HJ; John U et al. *Alcohol and Alcoholism* 43(1): 34-38, 2008. (30 refs.)

Aims: Previous studies investigating dose-response relations between volume of drinking and diseases have focused on single diseases only. Until now, the relation between the drinking volume and the risk of having any alcohol-attributable disease is largely unknown. The aim of the present study is to investigate to what extent is the risk of diseases with different alcohol-attributable fractions (AAFs) predicted by daily alcohol consumption (> 120 g, 61-120 g vs 31-60 g). Methods: The sample consisted of 805 inpatients classified as at-risk drinking, aged 18-64 years hailing from four general hospitals in North-eastern Germany. Inpatients were classified into three groups (AAF = 1, AAF < 1, AAF = 0). Group differences regarding alcohol-related variables, smoking, and demographics were analysed. A multinomial logistic regression analysis was conducted to predict the risk of diseases with AAF = 1 and AAF < 1. Results: In our sample, 26.6% of the inpatients showed a disease with AAF = 1, while 20.2% had a disease with AAF < 1. Inpatients consuming 120 g, and inpatients consuming 61-120 g revealed significantly higher odds for diseases with AAF = 1 compared to inpatients consuming 31-60 g (OR = 6.30, CI = 3.55-11.26; OR = 2.91, CI = 1.64-5.13). Regarding diseases with AAF < 1, inpatients consuming > 120 g revealed significantly higher odds compared to the inpatients consuming 31-60 g (OR = 1.97, CI = 1.15-3.37). Conclusion: A dose-response relation between the level of the drinking volume and

the risk of diseases with AAF = 1 was found in this sample of inpatients from the general hospitals. Copyright 2008, Oxford University Press.

#### **Everyday memory deficits in ecstasy-polydrug users.**

Montgomery C; Fisk JE. *Journal of Psychopharmacology* 21(7): 709-717, 2007. (32 refs.) Recent research suggests that not only does the use of recreational drugs impact on working memory functioning, but more 'everyday' aspects of memory (e.g. remembering to do something in the future) are also affected. Forty-three ecstasy-polydrug users and 51 non-ecstasy users were recruited from a university population. Each participant completed the Cognitive Failures Questionnaire (CFQ) and Everyday Memory Questionnaire (EMQ). Of these, 28 ecstasy-polydrug users and 35 non-ecstasy users completed the Prospective Memory Questionnaire (PMQ). In addition, an objective measure of cognitive failures (the CFQ-for-others) was completed by friends of participants. With the exception of the CFQ-for-others, in each regression equation, cannabis emerged as the only significant predictor of everyday and prospective memory deficits. Significant correlations were found between the different indicators of everyday memory and various measures of illicit drug use. Cannabis featured prominently in this respect. The present study provides further support for cannabis related deficits in aspects of everyday memory functioning. Ecstasy may also be associated with cognitive slips, but not to the same extent as cannabis. Copyright 2007, Sage Publications.

#### **Excretion of methamphetamine and amphetamine in human sweat following controlled oral methamphetamine administration.**

Barnes AJ; Smith ML; Kacinko SL; Schwilke EW; Cone EJ; Moolchan ET et al. *Clinical Chemistry* 54(1): 172-180, 2008. (35 refs.)

BACKGROUND: Understanding methamphetamine (MAMP) and amphetamine (AMP) excretion in sweat is important for interpreting sweat and hair testing results in judicial, workplace, and drug treatment settings. METHODS: Participants (n = 8) received 4 10-mg (low) oral doses of sustained-release S-(+)-MAMP HCl (d-MAMP HCl) within 1 week in a double-blind, institutional review board-approved study. Five participants also received 4 20-mg (high) doses 3 weeks later. PharmChek sweat patches (n = 682) were worn for periods of 2 h to 1 week during and up to 3 weeks after dosing. The mass of MAMP and AMP in each patch was measured by GC-MS, with a limit of quantification of 2.5 ng/patch. RESULTS:

MAMP was measurable in sweat within 2 h of dosing. After low and high doses, 92.9% and 62.5% of weekly sweat patches were positive, with a median (range) MAMP of 63.0 (16.8-175) and 307 (199607) ng MAMP/patch, respectively; AMP values were 15.5 (6.5-40.5) and 53.8 (34.0-83.4) ng AMP/patch. Patches applied 2 weeks after the drug administration week had no measurable MAMP following the low doses, and only 1 positive result following the high doses. Using criteria proposed by the Substance Abuse Mental Health Services Administration, 85.7% (low) and 62.5% (high) weekly sweat patches from the dosing week were positive for MAMP, and all patches applied after the dosing week were negative. **CONCLUSIONS:** These data characterize the excretion of MAMP and AMP after controlled MAMP administration and provide a framework for interpretation of MAMP sweat test results in clinical and forensic settings. Copyright 2008, American Association of Clinical Chemistry.

#### **Gamma-hydroxybutyric acid (GHB) withdrawal: A case report.**

Bennett WRM; Wilson LG; Roy-Byrne PP. *Journal of Psychoactive Drugs* 39(3): 293-296, 2007. (22 refs.) GHB is an increasingly popular drug of abuse that can be associated in select cases with growing dependence and a severe withdrawal syndrome. While benzodiazepines are recommended for treatment of the withdrawal syndrome, some cases have been described as benzodiazepine-resistant. The authors describe treatment of such a case, which was unsuccessfully treated initially with benzodiazepines, then successfully treated with adjuvant atypical neuroleptics, and offer a possible neurochemical explanation for why such agents may be theoretically more effective than benzodiazepines in treating GHB withdrawal. Copyright 2007, Haight-Ashbury Publishing.

#### **Human cannabinoid pharmacokinetics. (review).**

Huestis MA. *Chemistry & Biodiversity* 4(8): 1770-1804, 2007. (189 refs.) This review article deals with the pharmacokinetics of cannabinoids. There are two major sections; the first deals with absorption, distribution, metabolism and elimination. The discussion considers the effects of different routes of administration, metabolism, by both hepatic and extrahepatic routes, the terminal elimination half lives of THC-COOH, the percentage of THC excreted as urinary THC-COOH, cannabinoid-glucuronide conjugates, and urinary biomarkers of recent cannabis use. The second major section deals with the interpretation of cannabinoid concentrations in biological fluids, both plasma and urine, as well as

oral fluid and sweat. Again consideration is given to the impact of route of administration, concentrations after frequent use, and detection windows. Copyright 2007, Wiley-VCH Verlag GMBH.

#### **Illicit drug use and neonatal outcomes: A critical review.**

Schempf AH. *Obstetrical & Gynecological Survey* 62(11): 749-757, 2007. (88 refs.)

Although the neonatal consequences of tobacco and alcohol exposure are well established, the evidence related to prenatal illicit drug use is less consistent despite prevalent views to the contrary. The many social, psychosocial, behavioral, and biomedical risk factors for adverse birth outcomes associated with illicit drug use complicate the evaluation of neonatal effects. Placing emphasis on recent research, this review summarizes the epidemiologic literature on the neonatal impact of marijuana, opiate, and cocaine use. Of these drugs, cocaine use is most consistently related to fetal growth decrements and dose-response effects have been observed. However, studies to date have largely failed to control for associated social, psychosocial, and contextual factors. Additional recommendations for future research are provided. It is likely that interventions will need to address the factors surrounding drug use to greatly improve neonatal outcomes (e.g., social circumstances, poor nutrition, stress, infections). Copyright 2007, Lippincott, Williams & Wilkins.

#### **Methadone toxicity fatalities: A review of medical examiner cases in a large metropolitan area.**

Shields LBE; Hunsaker JC; Corey TS; Ward MK; Stewart D. *Journal of Forensic Sciences* 52(6): 1389-1395, 2007. (33 refs.)

Over the past several years, Medical Examiners in Kentucky and around the nation have observed a dramatic rise in drug intoxication deaths involving the prescription medication methadone. This documented rise in methadone-related deaths requires a better understanding of methadone's pathophysiology and the ways it contributes to significantly increase morbidity and mortality. This study reviews 176 fatalities ascribed to methadone toxicity by the Office of the Chief Medical Examiner in Kentucky between 2000 and 2004. Postmortem toxicological analysis recorded a more than 10-fold increase in methadone toxicity fatalities, rising from 6 cases in 2000 to 68 cases in 2003. Of the 176 methadone-related fatalities, methadone was the only drug detected in postmortem blood and urine toxicological analyses in 11 (6.25%) cases. The mean methadone blood concentration of all 176 cases was 0.535 mg/L (0.02-4.0). The following

psychoactive medications were detected: antidepressants (39.8%), benzodiazepines (32.4%), and other opioids in addition to methadone (27.8%). Cannabinoids were detected in 44 (28.4%) cases and cocaine or metabolite in 34 (21.9%) cases. Of the 95 cases with a known history of methadone use, 46 (48.4%) involved prescription by private physician. The interpretation of blood methadone concentrations alone or combined with other psychoactive drugs requires consideration of the subject's potential chronic use of and tolerance to the drug. A thorough investigation into the practices of procurement and use/abuse of methadone is essential to arrive at the proper designation of the cause of death. Copyright 2007, Blackwell Publishing.

### **Neurocognitive costs and benefits of psychotropic medications in older adults. (review).**

Brooks JO; Hoblyn JC. *Journal of Geriatric Psychiatry and Neurology* 20(4): 199-214, 2007. (222 refs.)

Psychotropic medications are widely used in older adults and may cause neurocognitive deficits. Older adults are at increased risk of developing adverse effects because of age-related pharmacodynamic and pharmacokinetic changes. This article provides a comprehensive review of the undesirable, and at times beneficial, effects of psychotropic medications. The review covers a wide range of medications that impair executive function, memory, and attention, as well as a much smaller group of medications that lead to improved neurocognitive function. Some of the most commonly used psychotropic medications in older adults, namely, antidepressants, sedatives, and hypnotics, are among the drugs that most consistently lead to cognitive impairments. Medications with anticholinergic properties almost invariably lead to neurocognitive dysfunction, despite symptom improvement. The neurocognitive costs and benefits of psychiatric medications should be considered in the context of disease treatment in older adults. Copyright 2007, Sage Publications.

### **Oral fluid as an alternative matrix to monitor opiate and cocaine use in substance-abuse treatment patients.**

Dams R; Choo RE; Lambert WE; Jones H; Huestis MA. *Drug and Alcohol Dependence* 87(2/3): 258-267, 2007. (52 refs.)

Interest in oral fluid as an alternative matrix for monitoring drug use is due to its ease-of-collection and non-invasiveness; however, limited data are available on the disposition of drugs into oral fluid. The objective of this research was to provide data on the

presence and concentrations of heroin, cocaine and multiple metabolites in oral fluid after illicit opioid and cocaine use. Thrice weekly oral fluid specimens (N=403) from 16 pregnant opiate-dependent women were obtained with the Salivette (R) oral fluid collection device. Evidence of heroin (N=62) and cocaine (N=130) use was detected in oral fluid by LC-APCI-MS/MS. 6-Acetylmorphine (6-AM), heroin and morphine were the major opiates detected, with median concentrations of 5.2, 2.3, and 7.5  $\mu\text{g/L}$ , respectively. Cocaine and benzoylecgonine (BE) had median concentrations of 6.4 and 3.4  $\mu\text{g/L}$ . Application of the Substance Abuse Mental Health Services Administration (SAMHSA) recommended cutoffs for morphine and codeine (40  $\mu\text{g/L}$ ), 6-AM (4  $\mu\text{g/L}$ ) and cocaine and BE (8  $\mu\text{g/L}$ ), yielded 28 opiate- and 50 cocaine-positive specimens. Oral fluid is a promising alternative matrix to monitor opiate and cocaine use in drug testing programs. These data guide interpretation of oral fluid test results and evaluate currently proposed SAMHSA oral fluid testing cutoffs. Copyright 2007, Elsevier Science.

### **Pharmaceutical modulation of illicit drug effects.**

Hernon C; Paoloni D; Ganetsky M. *American Journal on Addictions* 16(3): 245-246, 2007. (4 refs.)

The article focuses on the use of a pharmaceutical agent to modulate the unwanted adverse effects of a recreational drug called escitalopram in a group of adolescents. This group of adolescents was presented for medical care after using escitalopram in an attempt to reduce undesirable symptoms the following day after smoking cocaine at a party. Subsequently, they developed acute agitation within hours after taking the recreational drug. The situation demonstrates that significant adverse effects from this practice are possible. The researchers suggest that the pharmaceutical modulation of recreational drug use is an unstudied public health concern that requires further epidemiologic assessment. Copyright 2007, Taylor & Francis.

### **Symptoms experienced by law enforcement personnel during methamphetamine lab investigations.**

Witter RZ; Martyny JW; Mueller K; Gottschall B; Newman LS. *Journal of Occupational and Environmental Hygiene* 4(12): 895-902, 2007. (22 refs.)

This study was conducted to determine if law enforcement personnel experience symptoms associated with methamphetamine lab investigation and to assess those factors that may result in more symptoms. A total of 258 standardized, self-administered surveys were

distributed to law enforcement personnel attending national/regional training classes, between June 2004-February 2005. Ninety-three percent of the surveys were returned and used to determine symptoms experienced while investigating clandestine methamphetamine labs, as well as the job duties of the respondent and the personal protective equipment used. More than 70% of respondents reported headaches, central nervous system symptoms, respiratory symptoms, sore throat, and other symptoms. Unadjusted and adjusted risk of symptoms was higher for those who investigated more than 30 labs. Other significant risk factors included time spent in the lab, phase of investigation, presence of active chemical processes, and coexistent disease. Respirator use was not independently associated with the likelihood of reporting symptoms. It was concluded that methamphetamine lab investigation is positively associated with symptom reporting in a high percentage of law enforcement personnel involved in these tasks. For most individuals, the reported symptoms were transitory and diminished in a short time, but some individuals reported needing to seek medical attention with symptoms that persisted. Copyright 2007, Taylor & Francis.

**Systematic review of the fetal effects of prenatal binge-drinking. (review).**

Henderson J; Kesmodel U; Gray R. *Journal of Epidemiology and Community Health* 61(12): 1069-1073, 2007. (27 refs.)

Objective: The effects of binge-drinking during pregnancy on the fetus and child have been an increasing concern for clinicians and policy-makers. This study reviews the available evidence from human observational studies. Design: Systematic review of observational studies. Population: Pregnant women or women who are trying to become pregnant. Methods: A computerised search strategy was run in Medline, Embase, Cinahl and Psycinfo for the years 1970-2005. Titles and abstracts were read by two researchers for eligibility. Eligible papers were then obtained and read in full by two researchers to decide on inclusion. The papers were assessed for quality using the Newcastle-Ottawa Quality Assessment Scales and data were extracted. Main outcome measures: Adverse outcomes considered in this study included miscarriage; stillbirth; intrauterine growth restriction; prematurity; birth-weight; small for gestational age at birth; and birth defects, including fetal alcohol syndrome and neurodevelopmental effects. Results: The search resulted in 3630 titles and abstracts, which were narrowed down to 14 relevant papers. There were no consistently significant effects

of alcohol on any of the outcomes considered. There was a possible effect on neurodevelopment. Many of the reported studies had methodological weaknesses despite being assessed as having reasonable quality. Conclusions: This systematic review found no convincing evidence of adverse effects of prenatal binge-drinking, except possibly on neurodevelopmental outcomes. Copyright 2007, BMJ Publishing Group.

**Efficacy of a symptom-triggered practice guideline for managing alcohol withdrawal syndrome in an academic medical center.**

Stanley KM; Worrall CL; Lunsford SL; Couillard DJ; Norcross ED. *Journal of Addictions Nursing* 18(4): 207-216, 2007. (20 refs.)

This paper describes our experience with an evidence-based Adult Alcohol Withdrawal Syndrome Practice Guideline in an academic medical center. Combined data from two pilot studies demonstrate the efficacy of this approach for hospitalized patients. One hundred-six guideline-managed patients (pilot) were compared with 82 non-guideline managed patients (control). Pilot patients received significantly less benzodiazepine and significantly more clonidine. Significantly more pilot (34%) than control patients (11%) required no drug therapy to manage or prevent AWS symptoms. Adverse events were similar between groups. Control patients required significantly more sitters. These data suggest that hospitalized patients at risk for AWS can be effectively managed with a standardized, symptom-triggered approach. Copyright 2007, Taylor & Francis.

**Ethanol elimination rates in men and women in consideration of the calculated liver weight.**

Dettling A; Fischer F; Bohler S; Ulrichs F; Skopp G; Graw M et al. *Alcohol* 41(6): 415-420, 2007. (52 refs.) The purpose of the study was to examine gender differences on the pharmacokinetics of ethanol. Sixty-eight healthy men and 64 healthy women with normal body mass indexes received between 0.79 and 0.95 g ethanol/kg body weight in the form of their choice after they had eaten a "typical" breakfast. The aimed concentration for both genders was a blood alcohol concentration C-0 of 0.104 g/dl. Blood samples in the elimination phase were taken in 10- to 20-min intervals beginning after completion of absorption. The maximum blood ethanol concentration was 0.0819 +/- 0.0184 g/dl for women and 0.0841 +/- 0.0155 g/dl for men. The hourly ethanol elimination rate, calculated over a linear function, in blood of 0.0179 +/- 0.0030 g/dl/h in women was significantly higher than the 0.0159 +/- 0.0029 g/dl/h for men (P <.0001). In

relation to the liver weight, the hourly elimination rates were 5.008 +/- 0.678 g/kg liver/h for women and 4.854 +/- 0.659 g/kg liver/h for men, and were not statistically significant. The different liver masses as calculated in relation to the distribution volume account for the differing ethanol elimination rates between men and women. Copyright 2007, Elsevier Science.

#### **Management of neonatal abstinence syndrome in neonates born to opioid maintained women.**

Ebner N; Rohrmeister K; Winklbaier B; Baewert A; Jagsch R; Peternell A et al. *Drug and Alcohol Dependence* 87(2/3): 131-138, 2007. (64 refs.)

Neonates born to opioid-maintained mothers are at risk of developing neonatal abstinence syndrome (NAS), which often requires pharmacological treatment. This study examined the effect of opioid maintenance treatment on the incidence and timing of NAS, and compared two different NAS treatments (phenobarbital versus morphine hydrochloride). Fifty-three neonates born to opioid-maintained mothers were included in this study. The mothers received methadone (n = 22), slow-release oral morphine (n = 17) or buprenorphine (n = 14) throughout pregnancy. Irrespective of maintenance treatment, all neonates showed APGAR scores comparable to infants of non-opioid dependent mothers. No difference was found between the three maintenance groups regarding neonatal weight, length or head circumference. Sixty percent (n = 32) of neonates required treatment for NAS [68% in the methadone-maintained group (n = 15), 82% in the morphine-maintained group (n = 14), and 21% in the buprenorphine-maintained group (n = 3)]. The mean duration from birth to requirement of

NAS treatment was 33 h for the morphine-maintained group, 34 h for the buprenorphine-maintained group and 58 h for the methadone-maintained group. In neonates requiring NAS treatment, those receiving morphine required a significantly shorter mean duration of treatment (9.9 days) versus those treated with phenobarbital (17.7 days). Results suggest that morphine hydrochloride is preferable for neonates suffering NAS due to opioid withdrawal. Copyright 2007, Elsevier Science.

#### **Methamphetamine use and methicillin-resistant staphylococcus aureus skin infections.**

Cohen AL; Shuler C; McAllister S; Fosheim GE; Brown MG; Abercrombie D et al. *Emerging Infectious Diseases* 13(11): 1707-1713, 2007. (30 refs.)

Methicillin-resistant *Staphylococcus aureus* (MRSA) infections and methamphetamine use are emerging public health problems. We conducted a case-control investigation to determine risk factors for MRSA skin and soft tissue infections (SSTIs) in residents of a largely rural southeastern community in the United States. Case-patients were persons >12 years old who had culturable SSTIs; controls had no SSTIs. Of 119 SSTIs identified, 81 (68.1%) were caused by MRSA. Methamphetamine use was reported in 9.9% of case-patients and 1.8% of controls. After we adjusted for age, sex, and race, patients with MRSA SSTIs were more likely than controls to have recently used methamphetamine (odds ratio 5.10, 95% confidence interval 1.55-16.79). MRSA caused most SSTIs in this population. Transmission of MRSA may be occurring among methamphetamine users in this community. Copyright 2007, Centers for Disease Control.